

## CLAIMS

What is claimed is:

1. A method for use with a speech recognition device for improving speech recognition performance, said method comprising:
  - generating, from speech data for which speech recognition is to be performed, a plurality of pieces of speech data whose start positions of non-speech regions differ;
  - performing speech recognition using each of said pieces of speech data; and
  - identifying the most numerous recognized result from among the plurality of obtained recognized results.
2. A method according to Claim 1, wherein, by sequentially shifting the start position of said non-speech region from the start position of the speech region back to a position preceding by a predetermined time, a plurality of pieces of speech data whose start positions of non-speech regions differ are generated from said speech data for which speech recognition is to be performed.
3. A method according to Claim 2, wherein the information of the start position of said speech region is provided by a speech recognition engine which performs said speech recognition.
4. A method according to Claim 3, wherein the information of the start position of said speech region is obtained by performing a recognition process on the first speech data by using said speech recognition engine, or is obtained by averaging speech data for several pieces of data from the start which have been subjected to the recognition processing.
5. A method according to Claim 1, wherein a plurality of pieces of speech data whose start positions of non-speech regions differ are generated in such a manner that A/D conversion is performed on the input speech signal at a

predetermined sampling time interval, the speech signal is stored in sequence in a speech buffer in the order of sampling, and the position at which reading from the speech buffer starts is changed.

6. A method according to Claim 5, wherein said predetermined sampling time interval is for one piece of sampling data.

7. A method according to Claim 1, wherein a speech recognition engine is provided for each of a plurality of pieces of speech data whose start positions of non-speech regions differ, and the most numerous recognized result from among the recognized results of each speech recognition engine is identified.

8. A speech recognition device comprising:  
a speech data generation section for generating, from speech data for which speech recognition is to be performed, a plurality of pieces of speech data whose start positions of non-speech regions differ;  
a speech recognition engine for performing speech recognition on each of said pieces of speech data; and  
a recognized result selection section for selecting the most numerous recognized result from among the plurality of obtained recognized results.

9. A speech recognition device according to Claim 8, wherein said speech data generation section generates a plurality of pieces of speech data whose start positions of non-speech regions differ, from speech data for which speech recognition is to be performed, by sequentially shifting the start position of said non-speech region to a position preceding by a predetermined time.

10. A speech recognition device according to Claim 9, wherein said predetermined position is a position preceding by a predetermined time from the start position of the speech region.

11. A speech recognition device according to Claim 8, wherein said speech recognition engine identifies said start position of the speech region.

12. A speech recognition device according to Claim 10, wherein the information of said start position of the speech region is obtained by performing a recognition process on the first speech data by using said speech recognition engine, or is obtained by averaging data of speech data for several pieces of data from the start, which have been subjected to the recognition processing.

13. A speech recognition device according to Claim 8, further comprising:

an A/D converter for A/D-converting an input speech signal at a predetermined sampling time interval; and

a speech buffer for storing the A/D-converted speech data in the order of sampling,

wherein said speech data generation section generates a plurality of pieces of speech data whose start positions of non-speech regions differ, by changing the position at which reading from the speech buffer starts.

14. A speech recognition device according to Claim 13, wherein said predetermined sampling time interval is for one piece of sampling data.

15. A speech recognition device for improving speech recognition performance, said speech recognition device comprising:

a speech data generation section for generating, from speech data for which speech recognition is to be performed, a plurality of pieces of speech data whose start positions of non-speech regions differ;

a speech recognition engine, for performing speech recognition on the speech data, provided for each of a plurality of pieces of speech data whose start positions of non-speech regions differ; and

a recognized result selection section for selecting and providing as an output the most numerous recognized result from among the plurality of obtained recognized results.

16. A speech recognition device according to Claim 15, wherein said speech data generation section generates, from speech data for which speech recognition is to be performed, a plurality of pieces of speech data whose start positions of non-speech regions differ, by sequentially shifting the start position of said non-speech region from the start position of the speech region back to a position preceding by a predetermined time.

17. A speech recognition device according to Claim 15, further comprising:

an A/D converter for A/D-converting an input speech signal at a predetermined sampling time interval; and

a speech buffer for storing the A/D-converted speech data in the order of sampling,

wherein said speech data generation section generates a plurality of pieces of speech data whose start positions of non-speech regions differ, by changing the reading position from the speech buffer, and provides the speech data to each speech recognition engine.

18. A speech recognition device according to Claim 17, wherein said predetermined sampling time interval is for one piece of sampling data.

19. A speech recognition device according to Claim 15, wherein said speech recognition engine identifies said start position of the speech region.

20. A speech recognition device according to Claim 19, wherein the information of the start position of said speech region is obtained by performing a recognition process on the first speech data by using said speech recognition engine, or is obtained by averaging data of speech data for several pieces of data from the start, which have been subjected to the recognition processing.